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10/092,472	03/08/2002	Kaoru Murase	50023-166	1199

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McDERMOTT, WILL & EMERY
600 13th Street, N.W.
Washington, DC 20005-3096

EXAMINER

SON, LINH L D

ART UNIT	PAPER NUMBER
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2135

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/04/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/092,472

Applicant(s)

MURASE ET AL.

Examiner

Linh LD Son

Art Unit

2135

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed -
 - after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 September 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21 and 24-40 is/are pending in the application.
- 4a) Of the above claim(s) 38 and 39 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21, 24-36, 39-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This Office Action is responding to the Amendment received on 09/26/06.
2. Claims 37-38 are not entered status or withdrawn.
3. Claims 21, and 24-40 are pending.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 21, 24-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rabin, (Cited in PTO 892 dated 03/28/06), in view of Poisner, US Patent 6247151.
6. As per claims 21 and 32-35:
Rabin discloses "A recording and reproducing device recording and reproducing specific digital content data (Col 26 lines 35-42, Col 26 lines 55-66 "Copying of is the instance of software" and Col 26 lines 60-67, "Recorder"), comprising:

A program storage unit operable to store a control program for controlling the recording and reproducing device (Figure 4, # 200),

a detecting unit operable to detect whether or not an abuse of control program has occurred while the recording and reproducing device is in production, and during powered off" in (Col 40 lines 43-65) [Rabin does the detection by calculating a tag for each software execution and comparing the calculated tag with a certified tag for this software, by this process will also detect an instance of an abused control program during the power off];

a revoking unit operable to halt the use of the recording and reproducing device based on the abuse detected by the detecting unit (Col 40 lines 60-65),
Rabin further teaches a method of preventing an abuse of the recording and reproducing device by calculating and authenticating the signature of each instance of the control program processes with an authority or an authorized signature database.

However, Rabin does not disclose

"wherein the detecting unit comprises:

an abuse prevention information calculating unit operable to calculate

a) first abuse prevention information at the time of powering off the recording and reproducing device, by performing a specific function on the control program stored in the program storage unit, and

b) second abuse prevention information at the time of powering on the recording and reproducing device, by performing the specific function on the control program stored in the program storage unit;

an abuse prevention information storage unit for storing the first abuse prevention information calculated by the abuse prevention information calculating unit; and

a comparing unit operable to compare, if necessary, the first abuse prevention information stored in the abuse prevention information storage unit and the second abuse prevention information calculated at the time of powering on the device, and then judging the abuse based on the comparing result.

Nevertheless, Poisner discloses a "Method and Apparatus for Verifying that Data Stored in a Memory Has not Been Corrupted" invention, which includes a method for verifying that data stored in a memory location has not been altered during the powering down and powering up device (Fig 3).

Poisner teaches:

wherein the detecting unit (Fig 1, Memory verification logic 130) comprises:

an abuse prevention information calculating unit (Figure 2, signature generation logic 220) operable to calculate

a) first abuse prevention information at the time of powering off the recording and reproducing device, by performing a specific function on the control program stored in the program storage unit (Col 4 lines 35-55) [The signature generation logic reads the selected memory for abusive tracking, and generates the first signature before the

system is going to a suspended mode. The first signature is stored in a nonvolatile memory to prevent from being erased during power off (Col 4 lines 1-3)], and

b) second abuse prevention information at the time of powering on the recording and reproducing device, by performing the specific function on the control program stored in the program storage unit (Col 4 lines 55-64);

an abuse prevention information storage unit for storing the first abuse prevention information calculated by the abuse prevention information calculating unit (Col 4 lines 1-3); and

a comparing unit operable to compare, if necessary, the first abuse prevention information stored in the abuse prevention information storage unit and the second abuse prevention information calculated at the time of powering on the device, and then judging the abuse based on the comparing result (Col 4 line 60- Col 5 line 8).

Therefore, it would have been obvious at the time of the invention was made for one having ordinary skill in the art to modify Rabin's teaching to incorporate Poisner's method for Verifying that Data Stored in a Memory Has not Been Corrupted to check a certain memory area where critical and essential data stored for controlling the device. The verification process at the powered off and powered on event will protect and prevent the critical and essential data stored for controlling the device from being tampered with by hacker or corruption caused by power surged.

7. As per claim 24:

Poisner discloses "A recording and reproducing device according to claim 22, wherein the abuse prevention information storage unit is different from a storage unit storing the control program" in (Col 4 lines 1-3, and Figure 2, main memory 125).

8. As per claim 25:

Rabin discloses "A recording and reproducing device according to claim 22, wherein the abuse prevention information calculating unit calculates and stores the first abuse prevention information in the abuse prevention information storage unit when the control program is updated, and the comparing unit compares the first abuse prevention information stored at the update of the control program and the second abuse prevention information recalculated by the abuse prevention information calculating unit" in (Col 46 lines 27-54).

9. As per claim 26:

Rabin discloses "A recording and reproducing device according to claim 21, wherein at the time of detecting the abuse of the control program, the detecting unit sends the detecting result to a specific abuse detecting server" in (Col 43 lines 30-35, and Col 48 lines 47-57).

10. As per claim 27:

Rabin discloses "A recording and reproducing device according to claim 26, wherein the detecting unit further sends a unique ID specifying the recording and reproducing device to the specific abuse detecting server" in (Col 43 lines 1-35).

11. As per claim 28:

Rabin discloses "A recording and reproducing device according to claim 21, wherein the revoking unit halts the use of the recording and reproducing device on the basis of an instruction sent from the detecting unit" in (Col 43 lines 30-35, and Col 48 lines 47-57).

12. As per claim 29:

Rabin discloses "A recording and reproducing device according to claim 21, wherein the revoking unit halts the use of the recording and reproducing device on the basis of an instruction sent from a specific abuse detecting server" in (Col 43 lines 30-35, and Col 48 lines 47-57).

13. As per claim 30:

Rabin discloses "A recording and reproducing device according to claim 21, wherein the revoking unit halts the use of the recording and reproducing device on the basis of an instruction sent from a broadcast station" in (Col 43 lines 30-35, and Col 48 lines 47-57).

14. As per claim 31:

Rabin discloses "A recording and reproducing device according to any one of claims 28-30, wherein the revoking unit dissolves the halt of the use of the recording and reproducing device on the basis of a specific instruction" in (Col 43 lines 30-35, and Col 48 lines 47-57).

15. As per claim 36:

Rabin discloses "An abuse prevention system including a recording and reproducing device recording and reproducing specific digital content data (Col 26 lines 35-42, Col 26 lines 55-66 "Copying of is the instance of software" and Col 26 lines 60-67, "Recorder"), wherein the recording and reproducing device comprises:

A program storage unit operable to store a control program for controlling the recording and reproducing device (Figure 4, # 200);

a detecting unit operable to detect whether or not an abuse of control program has occurred while the recording and reproducing device is in production, and during powered off" in (Col 40 lines 43-65) [Rabin does the detection by calculating a tag for each software execution and comparing the calculated tag with a certified tag for this software, by this process will also detect an instance of an abused control program during the power off];

a sending unit operable to send a notice of abuse to a specific abuse detecting server when the abuse is detected (Col 43 lines 30-35, and Col 48 lines 47-57); and

a revoking unit operable to halt the use of the recording and reproducing device on the basis of an instruction sent from the abuse detecting server (Col 40 lines 60-65), and

wherein the abuse detecting server, in response to the abuse notice sent from the recording and reproducing device, sends the instruction to halt the use of the recording and reproducing device to the recording and reproducing device (Col 40 lines 60-65),

However, Rabin does not disclose

wherein the detecting unit comprises:

an abuse prevention information calculating unit operable to calculate

a) first abuse prevention information at the time of powering off the recording and reproducing device, by performing a specific function on the control program stored in the program storage unit, and

b) second abuse prevention information at the time of powering on the recording and reproducing device, by performing the specific function on the control program stored in the program storage unit;

an abuse prevention information storage unit for storing the first abuse prevention information calculated by the abuse prevention information calculating unit; and

a comparing unit operable to compare, if necessary, the first abuse prevention information stored in the abuse prevention information storage unit and the second abuse prevention information calculated at the time of powering on the device, and then judging the abuse based on the comparing result.

Nevertheless, Poisner discloses a "Method and Apparatus for Verifying that Data Stored in a Memory Has not Been Corrupted" invention, which includes a method for verifying that data stored in a memory location has not been altered during the powering down and powering up device (Fig 3).

Poisner teaches:

wherein the detecting unit (Fig 1, Memory verification logic 130) comprises:

an abuse prevention information calculating unit (Figure 2, signature generation logic 220) operable to calculate

a) first abuse prevention information at the time of powering off the recording and reproducing device, by performing a specific function on the control program stored in the program storage unit (Col 4 lines 35-55) [The signature generation logic reads the selected memory for abusive tracking, and generates the first signature before the system is going to a suspended mode. The first signature is stored in a nonvolatile memory to prevent from being erased during power off (Col 4 lines 1-3)], and

b) second abuse prevention information at the time of powering on the recording and reproducing device, by performing the specific function on the control program stored in the program storage unit (Col 4 lines 55-64);

an abuse prevention information storage unit for storing the first abuse prevention information calculated by the abuse prevention information calculating unit (Col 4 lines 1-3); and

a comparing unit operable to compare, if necessary, the first abuse prevention information stored in the abuse prevention information storage unit and the second abuse prevention information calculated at the time of powering on the device, and then judging the abuse based on the comparing result (Col 4 line 60- Col 5 line 8).

Therefore, it would have been obvious at the time of the invention was made for one having ordinary skill in the art to modify Rabin's teaching to incorporate Poisner's method for Verifying that Data Stored in a Memory Has not Been Corrupted to check a certain memory area where critical and essential data stored for controlling the device.

The verification process at the powered off and powered on event will protect and prevent the critical and essential data stored for controlling the device from being tampered with by hacker or corruption caused by power surged.

Claim Rejections - 35 USC § 102

16. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

17. Claims 39-40 are rejected under 35 U.S.C. 102(e) as being anticipated by Rabin.

18. As per claim 39:

Rabin discloses "A recording and reproducing device recording and reproducing specific digital content data, comprising:

a detecting unit operable to detect an abuse of a control program controlling the recording and reproducing device" in (Col 40 lines 43-65);

"a sending unit operable to send in specific time intervals to a specific abuse detecting server a notice of no abuse detected by the detecting unit (Col 41 lines 53-63); and

a revoking unit operable to enable to operate the recoding and reproducing device for a specific period on the basis of a control instruction to permit the use of the recording and reproducing device within a specific period, and, if no control instruction, operable to halt the use of the recording and reproducing device after operating the recording and reproducing device for the specific period, wherein

The control instruction is sent from the abuse-detecting server in response to the notice of no abuse (Col 43 lines 30-35, Col 44 line 64- Col 45 line 10, Col 47 lines 45-56, and Col 48 lines 47-67).

19. As per claim 40:

Rabin discloses "An abuse prevention system including a recording and reproducing device recording and reproducing specific digital content data, wherein the recording and reproducing device comprises:

a detecting unit operable to detect an abuse of a control program controlling the recording and reproducing device" in (Col 40 lines 43-65);

a sending unit operable to send in specific time intervals to a specific abuse detecting server a notice of no abuse detected by the detecting unit (Col 41 lines 53-63); and

a revoking unit operable to enable to operate the recoding and reproducing device for a specific period on the basis of a control instruction to permit the use of the recording and reproducing device within the specific period, and

wherein the detecting server, in response to the notice of no abuse sent from the recording and reproducing device, sends the instruction to permit the use of the

recording and reproducing device for the specific period (Col 44 line 64- Col 45 line 10),
and

the control instruction is sent from the abuse detecting server in response to the notice of no abuse (Col 43 lines 30-35, Col 44 line 64- Col 45 line 10, Col 47 lines 45-56, and Col 48 lines 47-67).

Response to Arguments


20. Applicant's arguments filed 09/28/06 have been fully considered but they are not persuasive in respect to newly added claims 39-40.
21. As per remark in the last paragraph of page 19 continuing to page 20, Applicant argues that Rabin does not teach "a control instruction sent from an abuse detecting server to a revoking unit in response to a notice of no abuse allows a recording and reproducing device to be operated, and if no control instruction, the revoking unit halts the device after a specific time". Examiner respectfully disagrees with the Applicant. In Col 44 line 24 to Col 45 line 12, Rabin teaches of a method utilizing the event history to track the last call up procedure to check for authorization with a Guardian server for an instance process. A verification step is necessary for a process to the Guardian server to able to continue after a predetermined amount of time. Therefore, Rabin still anticipates claims the newly added claims 39-40.

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Linh LD Son whose telephone number is 571-272-3856. The examiner can normally be reached on 9-6 (M-F).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on 571-272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Linh LD Son
Examiner
Art Unit 2135


KIM VU
SUPERVISORY PATENT EXAMINER
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